



## Residential Asthma "Trigger" and Indoor Air Quality Checklist

<b>HOUSEHOLD INFORMATION</b>												
Street Address:												
Ethnicity:						Zip Code:						
Please List all occupants of this residence:												
Age:		Sex:		Occupation:			How long at this address:					
1.												
2.												
3.												
4.												
5.												
6.												
<b>TYPE OF BUILDING:</b>												
Single Family												
Two Family												
Three Family												
Apartment Building (4 or more units)												
Do occupants rent or own house:   Y   N      If Renting, name of Landlord:												
<b>DATE OF CONSTRUCTION:</b>												
Before 1951												
Between 1951 and 1978												
After 1978												
Don't Know												
What is the house made of:    Wood      Brick      Other _____												
<b>1. BACKGROUND HEALTH INFORMATION:</b>												
1a.	Does anyone in the household have allergies?					Y	N	DK				
1b.	Has anyone in the household been diagnosed and/or hospitalized with asthma?											
											Y    N    DK	

<b>2. THINGS THAT MAKE YOUR ASTHMA WORSE:</b>									
2a.	Is your asthma worse in certain months? Y				N	DK			
2b.	Does your asthma get worse around animals such as birds, cats or dogs?								
	Y	N			DK				
2c.	Does your asthma get worse in a room where carpets are being vacuumed?								
	Y	N			DK				
2d.	Does making a bed make you asthma worse?				Y	N	DK		
2e.	Does your asthma get worse when you are around things with strong fumes or odors such as perfume, paint, hair spray, cleaning products or talcum powder?								
	Y	N			DK				
2f.	Does your asthma get worse around a wood-burning fireplace or wood stove?								
	Y	N			DK				
<b>3. GENERAL HOME AREA:</b>									
3a.	Does anyone (including yourself) smoke in your home?								
	Y	N			DK				
3b.	Is there wall-to-wall carpeting in the TV room?								
	Y	N			DK				
3c.	Is there any upholstered (cloth-covered) furniture in the TV room?								
	Y	N			DK				
3d.	Is there evidence of pests (such as cockroach, mice, rat) activity in your home? Y                      N                      DK								
3e.	Are throw rugs used any where in your home?				Y	N			
3f.	Are there doormats outside all entrances to your home?				Y	N			
3g.	Do you own or have access to a vacuum cleaner?				Y	N			
3h.	Do you have house plants?		Y	N					
3i.	Do you ever try to add moisture to the air in your home by using a humidifier, or by putting a pan of water on a wood stove or radiator?			Y	N	DK			
3j.	Is your home damp or have you had water problems or leaks? Y      N      DK								

3k.	Has your home undergone any remodeling which may have added new chemicals to the air.					
	Y	N	DK			
3l.	Are portable space heaters used in the home?			Y	N	DK
3m.	Is a kerosene (or liquid fuel) space heater used in the home?			Y	N	DK
3n.	Is the kerosene (or liquid fuel) space heater mechanically vented to the outdoors?					
	Y	N	DK			
<b>4. BEDROOM:</b>						
4a.	Are vinyl or allergy-control mattress and pillow covers used on all beds and bed pillows? Y N DK					
4b.	Is there wall-to-wall carpeting in any of the bedrooms?			Y	N	
4c.	Does the household pet(s) sleep on the bed(s)?		Y	N	NA	DK
4d.	Do you use feather or down pillows and/or comforters on your bed? Y				N	DK
4e.	Do you ever use a humidifier when you have a cold?		Y	N	DK	
4f.	Do you ever use a space heater in any bedroom in your house?		Y	N	DK	
4g.	Do you permit smoking in any bedroom in your house?		Y	N	DK	
<b>5. BATHROOM:</b>						
5a.	Is there wall-to-wall carpeting in the bathroom?		Y	N		
5b.	Is there an exhaust fan in the bathroom?		Y	N		
5c.	Is there evidence of water problems (water stains) on the walls or ceiling of the bathroom? Y N DK					
5d.	Are there signs of mold or mildew in the bathroom?		Y	N	DK	
5e.	Do you ever use a space heater in the bathroom?		Y	N	DK	
<b>6. KITCHEN:</b>						
6a.	Is there wall-to-wall carpeting in the kitchen?		Y	N		
6b.	Is there an exhaust fan in the kitchen?		Y	N	DK	
6c.	Is there evidence of water problems (water stains) on the walls or ceiling of the kitchen?					

	Y	N	DK
6d.	Is the refrigerator drip pan emptied and cleaned every three months?		
	Y	N	DK
6e.	Are the refrigerator coils vacuumed every six months?		Y N DK
6f.	Are there any water leaks or damp areas under the sink?		Y N DK
6g.	Is a gas range/oven used in the home?	Y N	DK
6h.	Does the gas range/oven produce freely burning yellow flame tips?		Y N DK
6i.	Is the gas range/oven ever used as a primary heat source for this area?		Y N DK

## 7. BASEMENT:

7a. Has there been any sewerage backup into the building or the surface of the ground in the last 5 years?

	Y	N	DK	
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7b. Are there signs of dampness in the basement (musty odor; visible water, mold or mildew; discoloration on walls; damp carpets or furniture)?

	Y	N	NA	DK
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7c. If there is a crawl space, is the soil covered with plastic?

	Y	N	NA	DK
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7d. Has your furnace been inspected within this past year? Y N DK

7e. If you have a gas dryer, have you checked the flame and made sure it is properly vented? Y N DK

7f. If you have a gas hot water heater, have you checked the flame and made sure it is properly vented? Y N DK

7g. Do you have a number of containers in the basement which might either contain paint, pesticides, solvents, or any other chemical?

Y N DK

7h. Have you noticed any kind of insulation on any pipes in the basement? Y N DK

7i. Is there any carpet in your basement or directly on concrete in your home? Y N DK

## **8. NEARBY ENVIRONMENT**

- 8a. Is your home located close, within a block, to a busy street or highway? Y N DK
- 8b. Is your home close, within 4 blocks, to an auto repair shop, gas station, dry cleaner, restaurant, factory? Y N DK
- 8c. Is the neighborhood dusty? Y N DK
- 8d. Do you smell your neighbor's wood smoke or barbecue? Y N DK
- 8e. Are there days when your asthma is worst outside, during summer heat waves, or spring pollen season? Y N DK

## **9. OCCUPATIONAL EXPOSURES**

- 9a. Does your asthma get worst at work or several hours after the start of work? Y N DK
- 9b. In your workplace, are you doing any dusty or fume producing jobs? Y N DK
- 9c. Does the use of any product at work or at home doing chores or hobbies cause any breathing problems? Y N DK

# ASTHMA CHECKLIST RESPONSE GUIDE

## 1. BACKGROUND HEALTH INFORMATION

1.A So you have asthma. Lots of people do. Sports stars, doctors, rock stars and presidents have asthma. The key to their success was learning how to control their asthma so that they did not have asthma attacks. You can be successful, too. You can learn what things in your home may make your attacks worse or more frequent so that you can avoid them. When your asthma is under control, you can lead a normal, full life.

1.B It is very important for you to tell your doctor that you are having breathing problems so that he or she can help you control your asthma. A doctor can give you medicine to help you. One kind of medicine will open up the airways in your lungs when you are having an asthma attack. Another kind of medicine helps protect your lungs so asthma attacks do not start. This home checklist will help you find the things in your home that may be making your asthma worse.

## 2. THINGS THAT MAKE YOUR ASTHMA WORSE

2.A If hot summer weather starts your asthma attacks, use an air conditioner in your home or go to places with air conditioning. If cold air starts your asthma attacks, cover your mouth with a scarf when you go outdoors. Your asthma attacks may also be related to the release of certain kinds of pollen from flowering plants.

2.B Stay away from places that you know have animals. Talk to your family about keeping animals out of your home. Keep animals out of your bedroom. Close the door and put up a gate.

2.C Dust in the carpet could be making your asthma worse. Have someone else in your family vacuum the carpet daily; or, if you vacuum, wear a dust mask. If possible, remove the carpeting and replace with washable area rugs.

2.D Dust in your mattress could be making your asthma worse. Using vinyl or allergy-control mattress pads and pillow covers on all your bedding is an excellent way to reduce asthma allergens. Dust mites, which live in your mattress and pillows, produce an asthma allergen. Every asthma sufferer should invest in these covers. Wash your sheets, blankets and pillows in hot water (over 130 degrees) frequently (sheets every week; pillows and blankets, every two weeks.)

2.E Strong odors and fumes in a room may be making your asthma

worse. Stay out of the room until the smell is gone -- for example, if a room is being painted or cleaned. Do not use sprays like deodorants. Use stick deodorants. Ask people in your family not to use sprays or strong perfumes.

2.F Do not use a wood-burning fireplace or a wood stove in your home.

### **3. GENERAL HOME AREA**

3.A Inhaling secondhand smoke can both cause asthma and make asthma worse. DO NOT ALLOW ANYONE TO SMOKE IN THE HOME. Ask the smokers kindly but firmly to smoke outdoors or quit smoking. No asthma sufferer should ever be exposed to secondhand smoke. If you smoke, the best gift you can give yourself and your lungs is to quit.

3.B Many people spend a great deal of time in the room of the house with a television. Wall to wall carpeting in this room needs to be vacuumed daily in order for an asthma sufferer to experience any sort of relief. Change vacuum cleaner bags often. Invest in the best possible vacuum cleaner you can afford -- see Consumer Reports for a list of those brands that have the most suction for the best price. Central vacuum systems are the best because almost no dust is left behind in the room. (Even the best vacuum cleaners spill a great deal of dust after it goes into the bag.) The ideal solution to dust problems is to remove the wall to wall carpeting and replace it with washable (over 130 degrees) area rugs.

The best area rugs, from an asthma sufferer's point of view, are those which can be machine washed (wash in water over 130 degrees). The next best solution is area rugs which can be removed and sent out for cleaning. To avoid falls, make sure the area rugs have a slip proof pad underneath. Area rugs should be turned over and vacuumed on both sides.

3C. Upholstered furniture, like mattresses and carpeting, are extraordinary breeding grounds for dust mites and, therefore, asthma allergens. Vacuum the furniture often. Wash pillows in water over 130 degrees or send the pillows out to be dry cleaned. It is very beneficial to asthma sufferers to prevent your pet from sleeping on your furniture. You may spend many hours on the sofa in front of the TV, and if your dog or cat have been sleeping on that sofa all day, you are exposing yourself to enormous amounts of pet dander, which is a serious asthma allergen.

3D. Cockroaches and other pests are very unloveable, but they carry the same allergens as our loveable pets. These allergens

trigger asthma attacks and may also cause asthma to develop in the first place. There are many ways to reduce the number of cockroaches in your home:

1. Don't leave empty soda cans or bottles on the counters or in a hallway waiting to be recycled, even if they are rinsed out. Put all such empty containers in a plastic bag tied shut with a twist tie.
2. Cockroaches are attracted to moisture. Repair any leaking pipes under the sink and dripping faucets.
3. Bags of flour, sugar, opened cereal boxes, sugar bowls, etc. should be sealed up in plastic bags or the contents should be put into covered plastic containers. Cockroaches, unfortunately, find their way into any unprotected food source.
4. Cockroaches will live in stacks of newspapers. Once again, when saving your newspapers for recycling, put them into a plastic garbage bag, sealed shut with a twist tie.
5. Follow common sense clean-up practices. Wash off your kitchen counters and table with a damp sponge frequently. Keep the bathroom clean and free of stacks of magazines and piles of wet towels.
6. Avoid standing water in plant containers.
7. Avoid leaving pet food and water standing overnight.
8. Avoid leaving unwashed dishes around, including in the dishwasher.
9. Use roach traps.
10. Stay outside when other people are spraying for roaches.

3.E Wall-to-wall carpeting is an excellent breeding ground for asthma allergens. Vacuum the carpet daily. If possible, remove the wall-to-wall carpeting and replace it with area rugs which can be machine washed (wash in water over 130 degrees). The next



best solution is area rugs which can be removed and sent out for cleaning. To avoid falls, make sure the area rugs have a slip proof pad underneath. Area rugs should be turned over and vacuumed on both sides.

3.F Install high quality door mats at all entrances to reduce the track-in of dust. Take off shoes after entering home. A good doormat will eliminate some of the outside dust from being tracked inside.

3.G Change vacuum cleaner bags often. Invest in the best possible vacuum cleaner you can afford -- see Consumer Reports for a list of those brands that have the most suction for the best price. Central vacuum systems are the best because almost no dust is left behind in the room. (Even the best vacuum cleaners spill a great deal of dust after it goes into the bag.) The ideal solution to dust problems is to remove the wall to wall carpeting and replace it with washable area rugs.

3.H Get rid of house plants. Mold grows in potted soil, and this mold can start your asthma attacks.

3.I Adding moisture to your home can cause more mold to grow. Don't humidify (add moisture to) your home. Your home's humidity should be kept below 50% at all times. In the summer, it is a good idea to dehumidify your home with an electric dehumidifier - especially basements. Dehumidifiers can be purchased at your local hardware store or appliance store.

3.J Excess moisture causes mold and mildew and promotes the breeding of dust mites, all of which are asthma triggers and/or allergens for some people.

3.K Sometimes you are exposed to chemicals which damage your lungs and lead to asthma. These chemicals can be found both at home and at work. You may be able to connect the two events that relate to your asthma. For example, you may have started a new job, and one year later been diagnosed with asthma after not having any symptoms previous to your new job. Or you may have remodeled your home and have been having breathing difficulties ever since.

These chemicals may not give off odors and are, therefore, hard to identify. Unfortunately, once the damage is done, you will always have asthma and will have to be careful of all the other things that can start up asthma attacks such as mold, secondhand smoke, etc., all of which are included in this checklist. So stick with this survey. It will help lessen or stop future asthma attacks.

#### **4. BEDROOM**

4.A Using vinyl or allergy-control mattress pads and pillow covers on all your bedding is an excellent way to reduce asthma allergens. Dust mites, which live in your mattress and pillows, produce an asthma allergen. Every asthma sufferer should invest in these covers. Wash your sheets, blankets and pillows in hot water (over 130 degrees) frequently (sheets every week; pillows and blankets, every two weeks.) Also see 2.D

4.B See 2.C

4.C As loveable as our pets are, they also cause asthma sufferers to suffer more. If you or someone in your household has been diagnosed with asthma, consider getting rid of your pet(s). If that is impossible, please bathe your pet once a week for two or three weeks, then every two or three weeks. With small dogs or cats, place the pet in the sink and pour a pitcher of comfortable temperature water over its body.

It is very beneficial to asthma sufferers to prevent your pet from sleeping on your bed. You spend one third of your day in bed, and if your dog or cat sleeps with you, you are exposing yourself to at least 8 hours daily of pet dander, which is a serious asthma allergen. Even the vinyl mattress pad won't protect you because the allergens will lie on the upper surface of the pad. Also see 2.B

4.D Switch to polyester, washable pillows (allergy free.) Remember to wash the pillows once a week in 130 degree water (hot, not warm.)

4.E Vaporizers breed mold, and mold may cause asthma attacks. Please do not use a vaporizer. Also see 3.I

4.F Electric space heaters are OK, but keep fire safety in mind. Other types of space heaters should not be used as they create combustion by-products which can trigger asthma.

4.G Try adopting a no smoking policy, or at least limit it to one room of the house. See 3.A

#### **5. BATHROOM**

5.A Wall-to-wall carpeting in the bathroom is an excellent breeding ground for mold and dust mites -- both of which are asthma allergens. Please remove wall to wall carpeting in all bathrooms. Use washable area rugs instead -- wash in hot water -- at least 130 degrees. To avoid falls, make sure the area rugs have a slip proof pad underneath. Also, see 3.E

5.B Exhaust fans help remove moisture from the bathroom as well as odors. If you don't have an exhaust fan, open the window slightly. Excess moisture causes mold and mildew, which are asthma allergens. Wash shower curtain and liner often.

5.C These water marks or stains can be caused by either leaks in the wall or by excessive moisture buildup. Install an exhaust fan. If moisture problem continue, have a plumber check for leaks in the pipes.

5.D Mildew on the tile in the shower and elsewhere can be removed by washing with a solution of 1/4 cup of bleach in a gallon of water.

5.E Be careful of electrical shock if you are using an electrical space heater. See 4.F for fuel type space heaters.

## **6. KITCHEN**

6.A Wall-to-wall carpeting in the kitchen is an excellent breeding ground for mold and dust mites -- both of which are asthma allergens. Please remove wall to wall carpeting in the kitchen. Use washable area rugs instead -- wash in hot water -- at least 130 degrees. To avoid falls, make sure the area rugs have a slip proof pad underneath.

6.B Exhaust fans help remove moisture from the kitchen as well as odors and combustion gases. If you don't have an exhaust fan, open a window slightly. Excess moisture causes mold and mildew, which are asthma allergens. Wash curtains and kitchen linen often. See also 5.B

6.C These water marks or stains can be caused by either leaks in the wall or by excessive moisture buildup. Install an exhaust fan to remove excess moisture from cooking. If moisture problem continue, have a plumber check for leaks in the pipes.

6.D Mold, an asthma allergen, loves to grow in dark, wet places, like your refrigerator drip pan. Empty and clean the drip pan once a month. Remove spoiled food from the refrigerator and wash the gasket around the door -- another mold breeding ground.

6.E Refrigerator coils in the back of the refrigerator are hard to reach but are a great dust collecting area. Dust is the home of dust mites who produce asthma allergens. Vacuum the coils every six months.

6.F Call a plumber to have these leaks fixed. This moisture attracts cockroaches and is also a breeding ground for mold.

6.G When using a gas range or oven, be sure it is properly vented to the outdoors.

6.H If your gas stove produces freely burning yellow flame tips, this indicates that either the stove ring needs cleaning or the burner needs adjustment. Contact your gas company for information.

6.I Do not use your stove for heating as this creates a number of combustion by-products including the deadly gas carbon monoxide.

## **7. BASEMENT**

7.A Have a plumber fix the sewage leak. Have sewage material removed and have the area disinfected. Remove carpeting and upholstered furniture which has become water damaged. Remove any wet boards or sheetrock. Install a pump to remove standing water. Have appliances checked for water damage.

7.B Mold and mildew could be making your asthma worse. Do not spend time in basements. Install a dehumidifier. Open windows in the warmer months.

7.C If possible, cover the soil in a crawl space with plastic or pour concrete.

7.D A gas or oil fueled furnace should be inspected every heating season to insure that it is burning the fuel efficiently and that it is properly vented.

7.E A yellow flame in your gas dryer means that it is not burning fuel efficiently and therefore producing more harmful combustion by-products. Have this checked out by a repair man or your gas company.

7.F Check the flame on your gas hot water heater every season. If you notice a persistent yellow flame, contact a repair man or your gas company.

7.G Properly dispose of all fluid filled containers in your basement that are out of date or of no use to anyone in your home. Look for hazardous waste collection days in your neighborhood. Have someone dispose of unwanted pesticides, paints, paint thinner, and other types of hazardous compounds for you if possible.

7.H Insulation may be made of asbestos, fiberglass or other types of material. Whatever the case, it is important to keep it intact and not knock against it or cut it. Avoid producing dust.

7.I Don't use wall to wall carpeting and if a throw rug is used over concrete, make sure moisture is not trapped under the rug.

## **8. NEARBY ENVIRONMENT**

8A. You may want to keep your windows closed during periods of high traffic or during road construction.

8B. You may want to keep your windows closed during the periods when local businesses are producing the most pollution, i.e., close the windows when a restaurant for example is doing the most cooking (lunch and dinner times). For businesses that pollute continuously during the day, close your windows when odors enter in because of wind direction. You may also want to leave your home during periods of high pollution from local businesses. Contact your local board of health and organize with your neighbors to begin addressing the problem in chronic pollution situations.

8C. Dust can be an asthma trigger. Dust usually results from dry weather conditions and wind which stir up particles from the ground and make them airborne. Construction work near your home is a typical source of neighborhood dust. Contact your local board of health or the construction company directly about dust control. Perhaps spraying down the construction site with water may be the solution.

8D. Smoke from a neighbor's chimney or BBQ can cause some people to suffer respiratory problems. Kindly inform your neighbor that you have a respiratory condition and see if that works first. Perhaps your neighbor might BBQ on the opposite side of their yard from yours, or they may forgo using wood to heat their home and use a cleaner source.

8E. It is important to keep attuned to the news about heat waves and protect yourself by staying indoors and using AC. Throughout Spring, Summer and Fall, various types of pollen are produced. If you know what time of year seems to cause you the most problems, prepare for it by staying indoors more and keeping windows closed.

## **9. OCCUPATIONAL EXPOSURES**

Respiratory problems which you think are due to workplace exposures need to be reported to your supervisor or your company's health and safety officer. If you work in areas where there are fumes and dust, you need to wear proper respiratory equipment. For more information on occupational exposures, contact your state Coalition on Occupational Safety and Health or the federal U.S. Department of Labor's Occupational Safety and

Health Administration.